

**WEST**

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L6: Entry 8 of 10

File: USPT

DOCUMENT-IDENTIFIER: US 6308202 B1

TITLE: System for targeting information to specific users on a computer network

Detailed Description Text (3):

In the disclosed embodiment, user terminal 20 is a WEBTV Internet terminal. As shown in FIG. 2, terminal 20 includes an electronics unit 22 (hereinafter referred to as "set-top box" 22 because it is often positioned on the top of a television set), an ordinary television set 24, and a remote control 28. Alternatively, set-top box 22 may be built into television set 24 as an integral unit.

Detailed Description Text (4):

The user terminal employs television set 24 as a display device for displaying video and audio data, and as a graphical user interface. The set-top box is coupled to the television set by a video and audio link 26. Link 26 is an RF (radio frequency), S-video, composite video, or other equivalent link. Set-top box 22 includes hardware and/or software to cause a graphical user interface to be displayed on television 24, by which the user can access various Internet system network services, browse the Web, send email, and otherwise access the Internet.

Detailed Description Text (5):

User terminal 20 may include a standard modem and/or an ISDN modem, so that line 32, between user terminal 20 and system 30, can be either a POTS line or an ISDN line. In the depicted embodiment, both a standard modem and an ISDN modem are included in set-top box 22. The set-top box receives power through a power line 21.

Detailed Description Text (6):

Remote control 28 acts as an input device and is operated by the user to control the user terminal while browsing the Web, sending email, and performing other Internet-related functions, as well as to control television viewing. The set-top box receives commands from remote control 28 via an infrared (IR) communication link. In alternative embodiments, the link between the remote control and the set-top box may be RF or any equivalent mode of transmission (e.g., wires, etc.).

Detailed Description Text (7):

Although user terminal 20 is described above in the context of a WEBTV Internet terminal, it will be appreciated that there are a number of other suitable contexts which are within the scope of the invention. One such context is a personal computer including a monitor or other graphics display device and a modem, where the computer is configured to run an Internet navigating program. In such a context, the computer monitor functions like television 24 of the WEBTV Internet terminal while the computer functions like set-top box 22 when the computer is running the Internet navigating program. Additionally, the computer will include a keyboard, mouse or other input device which functions like remote control 28.

Detailed Description Text (8):

In any event, a user wishing to receive content available on computer network 10, operates user terminal 20 to create a communications connection to system 30 via line 32. System 30 is capable of independently communicating with a plurality of user terminals and acting as a communications link to transmit content available on computer network 10 to each user's terminal as requested by the user. Once the communications connection to system 30 has been established, the user operates user terminal 20 to display the specific content the user is interested in. The user typically displays specific content by operating his or her user terminal to identify an address pointer which designates the location of the specific content on the computer network. In the disclosed embodiment, the user selects or identifies the address pointer using remote control 28. The remote control then communicates this identification to set-top box 22 which communicates with system 30 to locate and receive the content designated by the address pointer which the user identified. The method by which the content is located on the Internet and received by the user terminal is discussed in more detail below.

Although not necessary to this invention, the above described communications link between the address and categorization server systems allows user terminal 20, and more specifically, set-top box 22, to control when it is available to receive targeted information. Alternatively, the address server system and categorization server system might be connected to communicate directly or via the Internet. As a further alternative, the functions of the address server system and the categorization server system might be combined into a single server system.

US Reference Patentee Name (5):

Gerace

US Reference Patentee Name (15):

Gerace

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L6: Entry 7 of 10

File: USPT

DOCUMENT-IDENTIFIER: US 6338094 B1

TITLE: Method, device and system for playing a video file in response to selecting a web page link

Brief Summary Text (3):

System 300 includes a server 303 maintained by the broadcaster, a broadcasting antenna 304, a transceiver unit 305, a television set 306, and an Internet access point 307. Transceiver unit 305, which may be a set-top box, includes a receiving antenna 308 and a remote control unit 309. A viewer uses remote control unit 309 to control the transceiver unit and/or to interact with interactive television content via the transceiver unit. A video link 310 couples transceiver unit 305 to television set 306 so that the transceiver unit can use the television set as a display device.

Detailed Description Text (2):

FIG. 1 illustrates a series of user experiences provided in accordance with the present invention. An operator of a user interface device such as a network computer or a television having a set-top box connected to the Internet clicks 15 on a web link, which may for instance be a banner advertisement, and is able to view 18 a video-TV file playing on their computer or television screen. The video video-TV file provides lifelike motion and sound relating to the link, and begins virtually immediately after the click 15. Upon completion of the video, the user can view 20 the web page that was requested by the click 15. A television experience rich in color, motion and sound is thus provided to the web surfer directly upon request, without the delay that commonly follows clicking a link to request even a simple web page. After the video-TV file has played, the requested web page may be viewed.

Detailed Description Text (6):

In one embodiment, the device 22 is a television connected with a set-top box such as a Web TV.RTM. Plus Internet terminal. The transceiver 33 in this case has TV interface circuitry including a tuner that is tuned to receive the broadcast television video and to remove a television carrier signal. After the carrier signal is removed, TV interface circuitry digitizes the resulting video signal. In addition to the television interface, transceiver 33 preferably includes an infrared interface, a digital-analog converter, a video encoder/decoder and a modem. Software executed by the controller 30 receives the digitized signal from TV interface and decodes and checks the digitized signal for errors. Transceiver 33 drives the display 25, which in this embodiment is a television set, via video encoder and audio digital-to-analog converter. The controller 30 realizes a type of web browser that can access the Internet via a modem contained in the transceiver.

Detailed Description Text (14):

Referring additionally to FIG. 6 and FIG. 7, after downloading 60 the video file regarding the web link, the web link is sent 100 to the user interface device from first server 77 or second server 80 while the user is browsing the Internet. The web link contains a specialized uniform resource identifier (URI) 105 or URL, termed a first URI. For the situation in which the user interface device is a set-top box, the web link may be sent 100 as a trigger during broadcast of television signals. The trigger is sent during a vertical blanking interval of the television broadcast, according to the Advanced Television Enhancement Forum Specification (ATVEF), incorporated herein by reference. The first URI 105 in this embodiment has a transfer protocol type or scheme 110 which is "wtv," which operates much like hypertext transfer protocol (HTTP) but is specific to the WebTV.RTM. network. A target 112 of the first URI 105 directed to a template file on the first server 77. The first URI 105 contains as a parameter a second URI 115 that identifies the previously downloaded video-TV file stored on the mass storage unit 27. The first URI 105 also contains as a parameter a third URI 118 that identifies the web page corresponding to the link, which as mentioned above is located on the second server.

US Reference Patentee Name (10):

Gerace

US Reference Patentee Name (22):

1 of Gerace

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L6: Entry 6 of 10

File: USPT

DOCUMENT-IDENTIFIER: US 6345293 B1

TITLE: Personalized information for an end user transmitted over a computer network

Detailed Description Text (13):

FIG. 2 is a block diagram showing an exemplary hardware environment for practicing the customizable information distribution (CID) system of the present invention. The CID system includes a global server 210, a plurality of local servers 221, 222, . . . 229, and a plurality of client computers 241a, 241b, . . . 241z, 242a, 242b, . . . 242z, . . . 249a, 249b, . . . 249z, each of which can be implemented using the "general purpose" computer system 100 described above. Alternatively, client computers 241a, 241b, . . . 241z, 242a, 242b, . . . 242z, . . . 249a, 249b, . . . 249z may also be specialized microprocessor/microcontroller based systems, including television-based "set-top" boxes such as WebTV's boxes.

US Reference Patentee Name (11):Gerace

**WEST**

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**Search Results -**

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 IBM Technical Disclosure Bulletins

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**Search History**
**DATE:** Thursday, August 15, 2002    [Printable Copy](#)    [Create Case](#)

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<u>L34</u>	market near research same data	381	<u>L34</u>
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<u>L31</u>	((((705/9)!.CCLS.) )	315	<u>L31</u>
<u>L30</u>	((((705/8)!.CCLS.) )	670	<u>L30</u>
<u>L29</u>	((((705/7)!.CCLS.) )	595	<u>L29</u>

<u>L28</u>	((705/7-11)!.CCLS.) )	0	<u>L28</u>
<u>L27</u>	((707/11)!.CCLS.) )	0	<u>L27</u>
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<u>L25</u>	((707/8)!.CCLS.) )	542	<u>L25</u>
<u>L24</u>	((707/7)!.CCLS.) )	522	<u>L24</u>
<u>L23</u>	((707/7-11)!.CCLS.) )	0	<u>L23</u>
<u>L22</u>	((707/100)!.CCLS.) )	1154	<u>L22</u>
<u>L21</u>	((707/\$ )!.CCLS.) )	15686	<u>L21</u>
<u>L20</u>	((707/1 )!.CCLS.) )	1726	<u>L20</u>
<u>L19</u>	L18 and correlat\$	33	<u>L19</u>
<u>L18</u>	L16 and data same collection	44	<u>L18</u>
<u>L17</u>	L16 and data collection	279509	<u>L17</u>
<u>L16</u>	nielsen same ratings	71	<u>L16</u>
<u>L15</u>	L13 and neilsen same ratings	0	<u>L15</u>
<u>L14</u>	L13 and nielsen same ratings	0	<u>L14</u>
<u>L13</u>	l9 and market near survey	20	<u>L13</u>
<u>L12</u>	l2 and market near survey	11	<u>L12</u>
<u>L11</u>	L10 and attribute same database	4	<u>L11</u>
<u>L10</u>	l2 and market near data	28	<u>L10</u>
<u>L9</u>	((725/\$)!.CCLS.)	4634	<u>L9</u>
<u>L8</u>	((725/9)!.CCLS.) )	79	<u>L8</u>
<u>L7</u>	((725/35)!.CCLS. ) )	68	<u>L7</u>
<u>L6</u>	((725/2 )!.CCLS. ) )	56	<u>L6</u>
<u>L5</u>	((725/9 )!.CCLS. )	79	<u>L5</u>
<u>L4</u>	((705/35)!.CCLS.) )	616	<u>L4</u>
<u>L3</u>	((705/\$)!.CCLS.) )	14385	<u>L3</u>
<u>L2</u>	((705/14 )!.CCLS.) )	1077	<u>L2</u>
<u>L1</u>	((705/10 )!.CCLS. )	631	<u>L1</u>

END OF SEARCH HISTORY

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L43: Entry 15 of 22

File: USPT

Oct 12, 1999

US-PAT-NO: 5966695

DOCUMENT-IDENTIFIER: US 5966695 A

TITLE: Sales and marketing support system using a graphical query prospect database

DATE-ISSUED: October 12, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Melchione; Anthony R.	Bridgewater	NJ		
Martinez; Rafael	Fairfield	CT		
Seifert; Eric	East Northport	NY		
Hirsch; Martin	Teaneck	NJ		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Citibank, N.A.	New York	NY			02

APPL-NO: 08/ 544102 [PALM]

DATE FILED: October 17, 1995

INT-CL: [06] G06 F 17/60

US-CL-ISSUED: 705/10; 705/35

US-CL-CURRENT: 705/10; 705/35

FIELD-OF-SEARCH: 395/201, 395/606, 395/210, 395/235, 705/10, 705/35

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>5179660</u>	January 1993	Devany et al.	395/200
<input type="checkbox"/>	<u>5421008</u>	May 1995	Banning et al.	396/600

## OTHER PUBLICATIONS

Raymond L. Rusnak, "Consumer Credit-Scoring: Are There Lessons for Commercial Lenders?", Journal of Commercial Lending, v 76, n 11, pp. 37-42, Jul. 1994.

Ernest H. Schell, "How to Make Millions with Database Marketing", Datamation, v 38, n 16, pp. 77-79, Aug. 1994.

Katherine Morrall, "Technology Updates Market Research Methods", Bank Marketing, v 26, n 4, pp. 15-20, Apr. 1994.

Brian Hellauer, "Banks Take Aim at Target Marketing", Bank Management, v 69, n 2, pp. A26-A31, Feb. 1993.

Jon Berry, "The Rich and the Worthy: America's Banks are Taking Direct Marketing One Step Further", Adweek's Marketing Week, v 33, n 19, pp. 14-17, May 11, 1992.

Robert B. Slater, "Marketing Magicians Turn Information into Profit", Bankers Monthly, v 108, n 7, pp. 5A-7A, Jul. 1991.

L.L. Pershing, "Package Fine Tunes Marketing Programs", Computers in Banking, v 6, n 9, pp. 21-23, Sep. 1989.

Alan Cane, "Countdown to User-Friendly Banking", Financial Times, pp. 30+, Nov. 1988.

James A. Craig, "A Network Architecture for Retail Bank Network", Data Communication, v 17, n 11, p. 173, Oct. 1988.  
Morrall, K.; Database Marketing Leaves Marketing to the Branches; Bank Marketing; Nov. 1994; pp. 22-30.  
Rusnak, R; Consumer Credit Scoring; Journal of Commercial Lending; V76N11; pp. 37-42; Jul. 1994.

ART-UNIT: 271

PRIMARY-EXAMINER: Voeltz; Emanuel Todd

ASSISTANT-EXAMINER: Hughet; William N.

ABSTRACT:

An electronic sales and service support system and method for identifying sales targets using a centralized database to improve marketing success. The system includes a central database that receives comprehensive information from a variety of internal and external feeds, and standardizes and households the information in a three-level hierarchy (households, customers, and accounts) for use by a financial institution. The comprehensive information stored on the central database is accessed through micromarketing workstations to generate lists of sales leads for marketing campaigns. A database engine is provided for generating logical access paths for accessing data on the central database to increase speed and efficiency of the central database. The system distributes sales leads electronically to branch networks, where the sales leads are used to target customers for marketing campaigns. The central database is accessed by workstations of a central customer information system for profiling customers, enhancing customer relationships with the financial institution, and electronically tracking sales performance during marketing campaigns.

20 Claims, 24 Drawing figures



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L19: Entry 17 of 33

File: USPT

Sep 4, 2001

US-PAT-NO: 6286005

DOCUMENT-IDENTIFIER: US 6286005 B1

TITLE: Method and apparatus for analyzing data and advertising optimization

DATE-ISSUED: September 4, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cannon; Mark E.	Provo	UT		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Cannon Holdings, L.L.C.	Provo	UT			02

APPL-NO: 09/ 038380 [PALM]

DATE FILED: March 11, 1998

INT-CL: [07] G06 F 17/30

US-CL-ISSUED: 707/100; 705/7, 725/9, 455/2.01

US-CL-CURRENT: 707/100; 455/2.01, 705/7, 725/9

FIELD-OF-SEARCH: 707/1, 707/9, 707/10, 707/100-104, 707/7, 705/7-10, 455/2.01, 725/9

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

Search Selected

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4012132</u>	March 1977	Lazarus	353/25
<input type="checkbox"/>	<u>4930011</u>	May 1990	Kiewit	348/2
<input type="checkbox"/>	<u>5223924</u>	June 1993	Strubbe	348/7
<input type="checkbox"/>	<u>5260778</u>	November 1993	Kauffman et al.	348/6
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<input type="checkbox"/>	<u>5515098</u>	May 1996	Carles	348/8
<input type="checkbox"/>	<u>5636346</u>	June 1997	Saxe	705/1
<input type="checkbox"/>	<u>5664174</u>	September 1997	Agrawal et al.	707/6
<input type="checkbox"/>	<u>5675788</u>	October 1997	Husick et al.	707/104
<input type="checkbox"/>	<u>5742816</u>	April 1998	Barr et al.	707/104
<input type="checkbox"/>	<u>5812642</u>	September 1998	Leroy	379/92.01
<input type="checkbox"/>	<u>5842200</u>	November 1998	Agrawal et al.	707/1
<input type="checkbox"/>	<u>5848396</u>	December 1998	Gerace	705/10
<input type="checkbox"/>	<u>5855008</u>	December 1998	Goldhaber et al.	705/14
<input type="checkbox"/>	<u>5867386</u>	February 1999	Hoffberg et al.	700/83
<input type="checkbox"/>	<u>6029176</u>	February 2000	Cannon	707/104

## OTHER PUBLICATIONS

Cipolla, Emil T., "Data Mining: Techniques to Gain Insight Into Your Data," Enterprise Systems Journal, Dec. 1995, vol. 10, No. 13, pp. 18 (5).

ART-UNIT: 271

PRIMARY-EXAMINER: Alam; Hosain T.

ASSISTANT-EXAMINER: Fleurantin; Jean Bolte

## ABSTRACT:

The most preferred embodiment of the present invention is a computer-based decision support system that includes three main components: a database mining engine (DME); an advertising optimization mechanism; and a customized user interface that provides access to the various features of the invention. The user interface, in conjunction with the DME, provides a unique and innovative way to store, retrieve and manipulate data from existing databases containing media-related audience access data, which describe the access habits and preferences of the media audience. By using a database with a simplified storage and retrieval protocol, the data contained therein can be effectively manipulated in real time. This means that previously complex and lengthy information retrieval and analysis activities can be accomplished in very short periods of time (typically seconds instead of minutes or even hours). Further, by utilizing the advertising optimization mechanism of the present invention, businesses, networks, and advertising agencies can interactively create, score, rank and compare various proposed or actual advertising strategies in a simple and efficient manner. This allows the decision-makers to more effectively tailor their marketing efforts and successfully reach the desired target market while conserving scarce advertising capital. Finally, the user interface for the system provides access to both the DME and the optimization mechanism in a simple and straightforward manner, significantly reducing training time.

32 Claims, 46 Drawing figures

**WEST**

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L19: Entry 24 of 33

File: USPT

May 26, 1998

US-PAT-NO: 5758257

DOCUMENT-IDENTIFIER: US 5758257 A

TITLE: System and method for scheduling broadcast of and access to video programs and other data using customer profiles

DATE-ISSUED: May 26, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Herz; Frederick	Davis	WV	26260	
Ungar; Lyle	Philadelphia	PA	19103	
Zhang; Jian	Cherry Hill	NJ	08002	
Wachob; David	Elkins Park	PA	19117	
Salganicoff; Marcos	Philadelphia	PA	19130	

APPL-NO: 08/ 346425 [PALM]  
DATE FILED: November 29, 1994INT-CL: [06] H04 N 7/10, H04 N 7/14, H04 N 7/173

US-CL-ISSUED: 455/2; 348/1, 348/7, 348/10, 348/12, 348/13, 348/906, 380/7, 380/10, 380/21, 455/4.2, 455/5.1

US-CL-CURRENT: 725/116; 348/906, 380/231, 380/233, 705/51, 725/119, 725/131, 725/143

FIELD-OF-SEARCH: 348/1, 348/6, 348/7, 348/10, 348/12, 348/13, 348/906, 348/2, 455/2, 455/4.1, 455/4.2, 455/5.1

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4170782</u>	October 1979	Miller	358/84
<input type="checkbox"/>	<u>4264924</u>	April 1981	Freeman	358/86
<input type="checkbox"/>	<u>4381522</u>	April 1983	Lambert	358/86
<input type="checkbox"/>	<u>4694490</u>	September 1987	Harvey et al.	380/20
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<input type="checkbox"/>	<u>4706121</u>	November 1987	Young	358/142
<input type="checkbox"/>	<u>4745549</u>	May 1988	Hashimoto	364/402
<input type="checkbox"/>	<u>4751578</u>	June 1988	Reiter et al.	358/183
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<input type="checkbox"/>	<u>5003591</u>	March 1991	Kauffman et al.	380/10
<input type="checkbox"/>	<u>5075771</u>	December 1991	Hashimoto	358/84
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<input type="checkbox"/>	<u>5155591</u>	October 1992	Wachob	358/86
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<input type="checkbox"/>	<u>5534911</u>	July 1996	Levitan	348/1
<input type="checkbox"/>	<u>5541638</u>	July 1996	Story	348/7
<input type="checkbox"/>	<u>5600364</u>	February 1997	Hendricks et al.	348/1

## OTHER PUBLICATIONS

Otis Port, "Wonder Chips--How They'll Make Computing Power Ultrafast and Ultracheap", Business Week, Jul. 4, 1994, pp. 86-92.  
Jonathan Berry, "A Potent New Tool for Selling Database Marketing", Business Week, Sep. 5, 1994, pp. 34-40.  
William L. Thomas, "Electronic Program Guide Applications--The Basics of System Design", 1994 NCTA Technical Papers, pp. 15-20.  
Judith H. Irven et al., "Multi-Media Information Services: A Laboratory Study", IEEE Communications Magazine, vol. 26, No. 6, Jun., 1988, pp. 24-44.

ART-UNIT: 262

PRIMARY-EXAMINER: Peng; John K.

ASSISTANT-EXAMINER: Miller; John W.

## ABSTRACT:

A system and method for scheduling the receipt of desired movies and other forms of data from a network which simultaneously distributes many sources of such data to many customers, as in a cable television system. Customer profiles are developed for the recipient describing how important certain characteristics of the broadcast video program,

movie or other data are to each customer. From these profiles, "agreement matrix" is calculated by comparing the recipient's profiles to the actual profiles of the characteristics of the available video programs, movies, or other data. The agreement matrix thus characterizes the attractiveness of each video program, movie, or other data to each prospective customer. "Virtual" channels are generated from the agreement matrix to produce a series of video or data programming which will provide the greatest satisfaction to each customer. Feedback paths are also provided so that the customer's profiles and/or the profiles of the video programs or other data may be modified to reflect actual usage. Kiosks are also developed which assist customers in the selection of videos, music, books, and the like in accordance with the customer's objective profiles.

95 Claims, 11 Drawing figures

**WEST**

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L19: Entry 25 of 33

File: USPT

Mar 31, 1998

US-PAT-NO: 5734720

DOCUMENT-IDENTIFIER: US 5734720 A

TITLE: System and method for providing digital communications between a head end and a set top terminal

DATE-ISSUED: March 31, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Salganicoff; Marcos	Philadelphia	PA	19130	

APPL-NO: 08/ 477798 [PALM]

DATE FILED: June 7, 1995

## PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS The present application is a continuation application of U.S. patent application Ser. No. 08/346,425, filed Nov. 29, 1994.

INT-CL: [06] H04 N 7/167, H04 L 9/00, H04 K 1/00

US-CL-ISSUED: 380/20; 380/21, 380/30, 380/44, 380/47

US-CL-CURRENT: 380/211; 380/239, 380/262, 380/282, 380/30, 380/44, 380/47

FIELD-OF-SEARCH: 380/20, 380/30, 380/44, 380/47, 380/21

PRIOR-ART-DISCLOSED:

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## OTHER PUBLICATIONS

B. Schneier; Applied Cryptography; pp. 177-178; John Wiley &amp; Sons, Inc.; Oct. 1993.

B. Schneier; Applied Cryptography, Second Edition; pp. 32-34; John Wiley &amp; Sons, Inc.; Oct. 1995.

ART-UNIT: 222

PRIMARY-EXAMINER: Buczinski; Stephen C.

## ABSTRACT:

A system and method for scheduling the receipt of desired movies and other forms of data from a network. Feedback paths are provided so that customer's profiles and/or the profiles of the video programs or other data may be modified to reflect actual usage. Secure digital communications between a video head end and a customer's set top terminal in the feedback path is provided by generating, at the video head end, a seed random number  $N$  for seeding a random number generator of the customer's set top terminal, encrypting seed random number  $N$  using a public key algorithm using a public key  $P$  of the video head end to yield encrypted seed random number  $E(N,P)$ , sending the encrypted seed random number  $E(N,P)$  to the customer's set top terminal, decrypting the encrypted seed random number  $E(N,P)$  at the customer's set top terminal using a private key of the customer's set top terminal to yield seed random number  $N$ , generating a first number for each number  $i$  in a sequence  $K_{sub.i}$  at the customer's set top terminal and logically exclusive-ORing the first number in the sequence  $K_{sub.i}$  with a first data word in the decrypted data stream  $P_{sub.i}$  from the video head end, thereby forming a data stream  $C_{sub.i}$ , sending the result  $C_{sub.i}$  from the customer's set top terminal to the video head end, and decrypting  $C_{sub.i}$  to yield a decrypted  $P_{sub.i}$  by logically exclusive-ORing sequence  $K_{sub.i}$  with  $C_{sub.i}$ .

4 Claims, 11 Drawing figures

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